

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Printed and Triotesark Office Address CORMISSIONIES FOR PATENTS F.O. Dos 14/9 Alexandra, Vigenia 22313-14/9

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/284,690	07/16/1999	LOUIS ROUSSEAU	VANM107,001A	2677

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38834 7	590 05/28/2004		EXAM	INER

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW PAPER NUMBER SUITE 700

WASHINGTON, DC 20036 OATE MAILEO 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary  Examiner Area A Donotherix A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(5) FROM THE MALLING DATE Of THIS COMMINICATION.  A SHORTENED AND A DONOTHER AREA AREA AREA AREA AREA AREA AREA A	Office Action Summary		Application No.		Applicant(s)	
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Any may reviewed by the Office tier the anthree words after the marking after of this communication, even if timely flexic, may reduce any exemptions to a communication(s) filled on 16 March 2004.    20	- IING	period for reply is specified above, the maximum statutory period v	will apply and will expire SIX	(6) MONTHS 6	om the mailing date of this	nonsonumen
In the service of communication(s) field on 16 Merch 2004.  20   This action is FINAL 20   This action is non-final.  20   This action is FINAL 20   This action is non-final.  30   Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex perie Quayle, 1935 C.D. 11, 453 O.G. 213.  \$\$position of Claims  4 SC   Claim(s) 2 dand 16.25 is/dee pending in the application.  4 Of the above claim(s) is/dee allowed.  5 C   Claim(s) is/dee allowed.  7 SC   Claim(s) is/dee allowed.  5 C   Claim(s) is/dee allowed.  8 C   Claim(s)	Any	reply received by the Office later than three months after the mailing	, cause the application to be gldate of this communication	, even if timely	filed, may reduce any	
1) ≥ Responsive to communication(s) filed on 16 March 2004. 20 ≥ This action is FINAL. 2b   This action is non-final. 30   Since his application is no confinor of allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  **spotiation of Claims**  4  ≥ Claim(s) 2 ± and 16.25 islare pending in the application. 4  0 of the above claim(s)   solare withdrawn from consideration. 5  ⊃ Claim(s)   sider allowed. 5  ⊇ Claim(s) 2 and 16.18 islare rejected. 7  ≥ Claim(s) 2 and 16.18 islare rejected. 7  ≥ Claim(s) 2 and 19.25 since objected to. 8  ⊃ Claim(s) 2 and 19.25 since objected to.		ed patent term adjustment. See 37 CFR 1.704(b).				
2a ⊠ This action is FINAL. 2b ∬ This action is non-final.  3 ∭ Since this application is nontifinal for ellowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  sposition of Claims  sposition of Claims  4a) Of the above claim(s) is learn pending in the application.  4a) Of the above claim(s) is learned aclowed.  Similar (Simils) is part of 1945 is learned excepted.  Similar (Simils) is part 1945 is lawne objected to.  Similar (Simils) is and 1945 is lawne objected to.  Claim(s) is an excepted to restriction and/or election requirement.	tatus					
3 □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under £x parte Quayle, 1935 C.D. 11, 453 O.G. 213.  sposition of Claims  4 □ Claim(s) 2.4 and 16.25 islare pending in the application.  4 □ Of the above claim(s)	1)[🛛	Responsive to communication(s) filed on 16 M	larch 2004.			
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4 Claim(s) <u>2.4 and 16.25</u> islare pending in the application. 4) Of the above claim(s) islare withdrawn from consideration. 5) Claim(s) islare allowed.  5) Claim(s) islare allowed.  7 Claim(s)		closed in accordance with the practice under E	x parte Quayle, 193	35 C.D. 11,	453 O.G. 213.	
4  Of the above claim(s)   solare withdrawn from consideration.   5  Claim(s)   sidere allowed.   5  Claim(s)   2 and 16-18 iskner expected.   7  Claim(s)   2 and 16-18 iskner objected to.   6  Claim(s)   3 and 19-28 iskner objected to.   7  Claim(s)   and 19-28 iskner objected to restriction and/or election requirement.   9  Claim(s)   and   9  Papers	isposit	on of Claims				
5 ☐ Claim(s)isfare allowed.  6 ☐ Claim(s) 2 and 12 laise rejected.  7 ☐ Claim(s) 2 and 12 52 laise objected to.  8 ☐ Claim(s) are subject to restriction and/or election requirement.	4)⊠	Claim(s) 2.4 and 16-25 is/are pending in the ap	oplication.			
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7 /☑ Claim(s) 4 and 19-25 siare objected to. 8 □ Claim(s) are subject to restriction and/or election requirement.  pplication Papers	5)	Claim(s) is/are allowed.				
Claim(s) are subject to restriction and/or election requirement.  plication Papers	6)⊠	Claim(s) 2 and 16-18 is/are rejected.				
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The specification is objected to by the Examiner.

10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 

All b) 

Some c) 

None of:

1. Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No.

3. Copies of the certified copies of the priority documents have been received in this National Stage. application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. \_\_\_\_\_. 5) Notice of Informal Patent Application (PTO-152)
6) Other:

#### DETAILED ACTION

# Claim Rejections - 35 USC § 103

- The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- Claims 2 and 16-18 continue to be rejected under 35 U.S.C. 103(a) as being unpatentable over Baraldi et al. (4,060,042) in view of Giraud (3,916,806).

With respect to claims 2 and 17, Baraldi et al. discloses an apparatus for the pyrolysis of waste comprising:

a rotating cell formed of a cylindrical sections (7) and (8) wherein the diameter of section (7) is larger than that of section (8) and the two sections are connected by a region (6) which extends between the larger diameter (7) and smaller diameter (8) sections (this region (6) reads on a "retaining threshold" as defined by applicant's specification, p. 3, lines 23-28);

a hopper (10) for charging waste at one end of the rotating cell; an ash box (32) at the other end of the rotating cell; and a recovery chimney (39).

Baraldi et al. discloses wherein the material of section (8) is to be "substantially burned" (col. 4, lines 7-15) but does not disclose wherein section (8) of the rotating cell is of a truncated conical formation.

Giraud teaches also teaches a rotating cell for incineration of refuse wherein the incineration chamber is of a truncated conical shape (152). Giraud further discloses that the truncated conical combustion shape "ensures a substantially uniform speed of flow for all the constituents under treatment" and teaches that a cylindrical form has undesirable results of incomplete destruction of the materials (col. 2, lines 30-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching Giraud of a truncated conical formation for an incineration/combustion portion of a rotating cell in order to ensure the complete combustion of the materials in that section, as desired by Baraldi et al.

With regard to the waste being converted into coke which is used in the truncated cone as fuel for pyrolysis of waste, such limitations are operational conditions and not given weight in an apparatus daim. An apparatus claim covers what a device is, not what a device does. MPEP 2114. The material worked upon also does not limit an apparatus claim. MPEP 2115.

With respect to claims 16 and 18, Baraldi et al. disclose wherein the connecting region (6) is of a conical shape (see fig. 1).

#### Allowable Subject Matter

 Claims 4 and 19-25 continue to be objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

 Applicant's arguments filed March 16, 2004 have been fully considered but they are not persuasive.

Applicant agrees that Giraud provides a teaching regarding the advantages of a conical shape but argues that this advantage is only recognized for a furnace in which Application/Control Number: 09/284,690

Art Unit: 1764

liquid as well as solid waste is present and that Baraldi has only dry waste in the incineration section,

The examiner respectfully disagrees with applicant. The examiner finds that applicant has ignored the recitation of viscous in their analysis of the col. 2, lines 30-39 passage of Giraud which states, with regard to the waste materials, "be they more or less viscous or liquid".

While Baraldi does disclose that waste material is dehydrated prior to the incineration chamber of the rotating device (in the sense that a liquid which could be evaporated is removed). Baraldi also discloses that the waste materials form slag in the incineration chamber (col. 4, lines 7-15). Slag formation indicates that at least a portion of the waste materials achieves a molten state, therefore a variation of viscosity in the waste material in the incineration chamber would occur and thus the recognized advantages of the conical shape of Giraud have applicability to the Baraldi reference.

Applicant argues, in view excerpts of a manual provided by applicant which compares conventional pyrolysis and incineration processes, that one would be reluctant to modify the cylindrical zone of Baraldi because of the need to maintain a large air flow in the incinerator.

The examiner does not find this argument persuasive. As discussed above, the conical shape has recognized advantages which would motivate one to modify the Baraldi reference in such a manner.

With regard to the air flow, the examiner finds that it would be well within the ability of one of ordinary skill in the art making such a modification to size the conical shaped portion for sufficient air flow in the device. Additionally, the references of Bolle (3,882,801), Bauer et al. (3,847,095), Du Chambon (3,771,471) and Rousseau (3,682,117) are now made of record in order to demonstrate that rotating incineration chambers of a conical shape are known to the art.

## Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filled within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM -7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Application/Control Number: 09/284,690 Art Unit: 1764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toil-free).

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Alexa Doroshenk Patent Examiner Art Unit 1764

May 25, 2004